

CLAIMS:

What is claimed is:

- 1 1. A method comprising:
- 2 receiving a request to establish a communication session between a subscriber unit in a
- 3 wireless communication system and a data network access server through a basestation; and
- 4 selectively generating a communication session identifier to uniquely identify the
- 5 communication session from a plurality of communication sessions supported by the network
- 6 access server to enable mobility management within the point-to-point communication session
- 7 between the basestation and the network access server.
- 1 2. A method according to claim 1, further comprising:
- 2 determining, at the network access server, whether the received request is a request for a
- 3 new communication session or a handoff of an existing communication session.
- 1 3. A method according to claim 2, wherein generation of the communication session
- 2 identifier is selectively performed if the received request is a request for a new communication
- 3 session.
- 1 4. A method according to claim 2, wherein determining comprises:
- 2 analyzing attribute-value pair(s) (AVP) of the received incoming call request to identify a
- 3 callType AVP; and

identifying the incoming call request as a request for a new communication session if the callType AVP is absent from the incoming call request, or an identified callType AVP associated with the incoming call request denotes a new call.

5. A method according to claim 1, wherein selectively generating the communication session identifier comprises:

composing a deterministic element of the communication session identifier;
composing a random element of the communication session identifier; and
employing a mathematical function to generate the communication session identifier using the deterministic element and the random element.

6. A method according to claim 5, wherein the deterministic element is comprised of one or more of an electronic serial number (ESN) of the accessing subscriber unit, a media access control (MAC) address of the subscriber unit, and/or a telephone number associated with the subscriber unit.

7. A method according to claim 5, wherein the random element is comprised of one or more of a pseudo-random number, and/or a true random number generated from radio frequency (RF) energy of thermal noise associated with the communication session.

8. A method according to claim 5, wherein the function employed concatenates the deterministic element and the random element to generate the communication session identifier.

a session identification generator, selectively invoked by communications agent, to dynamically generate a communication session identifier including at least a deterministic element and a random element.

14. An apparatus according to claim 13, wherein communications agent analyzes attribute-value pair(s) (AVP) of a received incoming call request control command to identify a callType AVP to determine whether the incoming call request indicates a new communication session or a handoff of an existing communication session.

15. An apparatus according to claim 14, wherein communications agent selectively invokes communication session identification generator if the AVP denotes a newCall call type, or if the callType AVP is not identified within the incoming call request control command.

16. An apparatus according to claim 13, wherein the session identification generator composes the deterministic element using one or more of an electronic serial number (ESN) of the accessing subscriber unit, a media access control (MAC) address of the subscriber unit, and/or a telephone number of the subscriber unit.

17. An apparatus according to claim 13, wherein the session identification generator composes the random element of the session identifier utilizing a pseudo-random number generator.

1 23. A machine accessible medium according to claim 20, wherein the communications agent
 2 generates the session identifier upon determining that an incoming call request is for a new
 3 communication session and not a handoff of an existing communication session.

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1 24. A machine accessible medium according to claim 23, wherein the communications agent
 2 dynamically generates a unique session identifier including a deterministic element and a random
 3 element.